WHAT IS CLAIMED IS:

1. For use in a system for effecting packet communication over a plurality of separate transmission paths each adapted to connect separate Bluetooth-enabled elements, the paths each being implemented to transmit packets in independent channel hopping patterns that exhibit quasi-random frequencies in discrete time slots, a method of avoiding transmission interference between the paths, which comprises the steps of:

predicting a first future time slot(s) when the frequency hops of the respective channel hopping patterns will coincide; and

muting the transmission of packets over a first subset of the paths during the predicted time slot(s).

2. A method as defined in claim 1, in which the first subset includes all but one of the paths.

3. A method as defined in claim 1, in which the first subset is selected at random.

4. A method as defined in claim 1, in which the first subsets contains the path(s) carrying traffic having a then-lower priority of transmission.

5. A method as defined in claim 1, in which at least one of the paths carries real-time traffic and the other path(s) carry non real-time traffic, and in which the first subset contains the path(s) carrying non real-time traffic.

6. For use in a system for effecting packet communication over at least three separate transmission paths each adapted to connect separate Bluetooth-enabled elements, the paths each being implemented to transmit packets in independent channel hopping patterns that exhibit quasi-random frequencies in discrete time slots, a method of avoiding transmission interference between the paths, which comprises the steps of:

predicting a first future time slot(s) when the frequency hops of the respective channel hopping patterns will coincide;

muting the transmission of packets over a plurality of first ones of the paths during the predicted time slot(s), the number of first paths being less than the total number of paths;

storing, during the predicted time slot(s), the packets normally transmitted over each of the first paths; and

releasing the stored packets for transmission over the corresponding first paths after the occurrence of the predicted time slot(s).

7. A method as defined in claim 6, in which the releasing step is carried out with a sequential release of the stored packets, the stored packets having the oldest content being released first.

8. A method as defined in claim 7, in which each of the first paths carries real time traffic.

9. A method as defined in claim 6, in which the releasing step is carried out with a sequential release of the stored packets, the stored packets having the largest content being released first.

10. A method as defined in claim 9, in which each of the first paths carries non real-time traffic.

11. A Bluetooth-enabled terminal comprising:

a core;

a plurality of radio interfaces associated with the core for independently supporting a plurality of Bluetooth radio modules;

a baseband controller coupled to the radio interfaces for normally effecting packet transmission from the associated radio modules with independent channel hopping patterns in which the packets exhibit quasi-random frequencies in discrete time slots:

means for predicting a future time slot(s) when the frequency hops of the respective channel hopping patterns will coincide; and
means for muting the transmission of packets from a first subset of the radio modules during the predicted time slot(s).

12. A terminal as defined in claim 11, in which the first subset includes all but one of the radio modules.

13. A terminal as defined in claim 11, in which the muting means comprises, in combination, a plurality of buffers individually associated with the respective radio modules; means for storing, in the buffer(s) associated with the radio module(s) in the first subset, the packets whose transmission is muted over the predicted time slot(s); and means for releasing the stored packets in such buffer(s) for transmission from the radio module(s) in the first subset after the occurrence of the predicted time slot(s).

14. In a system for effecting packet communication over a at least three separate transmission paths each adapted to connect separate Bluetooth-enabled elements, the paths each being implemented to transmit packets in independent channel hopping patterns that exhibit quasi-random frequencies in discrete time slots, apparatus for avoiding transmission interference between the paths, which comprises the steps of:

means for predicting a first future time slot(s) when the frequency hops of the respective channel hopping patterns will coincide;
means for muting the transmission of packets over a plurality of first ones of the paths during the predicted time slot(s), the number of first paths being less than the total number of paths;
means for storing, during the predicted time slot(s), the packets normally transmitted over each of the first paths; and

means for subsequently releasing the stored packets for transmission over the corresponding first paths in a sequence determined by a selected characteristic of the stored packets.

15. Apparatus as defined in claim 14, in which the selected characteristic is the relative age of the contents of the respective packets.

16. Apparatus as defined in claim 14, in which the selected characteristic is the relative size of the contents of the respective packets.